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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,691	11/02/2007	Sachiko Miyagawa	920_098	2318
25191	7590	03/26/2010	EXAMINER	
BURR & BROWN			LAVARIAS, ARNEL C	
PO BOX 7068			ART UNIT	
SYRACUSE, NY 13261-7068			PAPER NUMBER	
			2872	
			MAIL DATE	
			DELIVERY MODE	
			03/26/2010	
			PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/594,691

**Applicant(s)**

MIYAGAWA ET AL.

**Examiner**

Amel C. Lavarias

**Art Unit**

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/2/10, 11/2/07, 3/16/07, 9/28/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/16/07, 9/28/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Species 1, Figure 1 (Claims 1, 3-5) in the reply filed on 2/2/10 is acknowledged. The traversal is on the ground(s) that Species 1 and 2 are sufficiently related that all pending claims could be examined together in a single application without imposing any undue burden on the PTO. This is not found persuasive because Applicants' remarks are purely argumentative and do not provide any evidentiary support to show why it would not have been a serious burden to the examiner to examine multiple different species if restriction were not required. It is plainly evident, as previously set forth in Section 2 of the Office Action dated 11/10/09, that each of the species requires, at the very least, a different field of search to obtain appropriate prior art for the requisite special technical features.  
The requirement is still deemed proper and is therefore made FINAL.
2. Claim 2 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 2/2/10.

***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 3/31/04. It is noted, however, that applicant has not filed a certified copy of the 2004-108378 application as required by 35 U.S.C. 119(b).

***Information Disclosure Statement***

4. Various documents listed in the information disclosure statement filed 3/16/07 fail to comply with 37 CFR 1.98(a)(3) because they do not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. These documents have been crossed out, and the information referred to therein have not been considered.

***Drawings***

5. The originally filed drawings were received on 11/2/07. These drawings are acceptable.

***Specification***

6. The substitute specification filed 11/2/07 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: the statement as to a lack of new matter under 37 CFR 1.125(b) is missing.
7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. *The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.* The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. *It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.*

8. The abstract of the disclosure is objected to because of the following informalities:

Abstract, line 3- 'There is provided an' should read 'An'

Abstract, line 6- 'comprises' should read 'includes'

Abstract, line 9- 'comprising' should read 'including'.

Correction is required. See MPEP § 608.01(b).

9. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

10. Claims 1, 3-5 are objected to because of the following informalities:

Claim 1 recites the limitation "the absolute value" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the difference" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the occurrence" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the difference" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 3-5 are dependent on Claim 1, and hence inherit the deficiencies of Claim 1.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 4, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al. (WO 2004/000550 A1).

Fukuda et al. discloses an antireflection film (See for example Abstract; Page 18, lines 5-20) comprising a transparent base material film (See for example Page 22, lines 12-22; Page 26, line 8-Page 29, line 12) and, provided on the transparent base material film in the following order, an antistatic hardcoat layer (See for example primer/hardcoat layer, Page 46, line 18-Page 50, line 16; Page 37, line 15-Page 38, line 4) comprising an antistatic agent (See for example primer and added conductive material in hardcoat layer, Page 37, lines 15-24; Page 50, lines 7-16) and an ionizing radiation curing resin (See for example Page 39, lines 9-18; Page 47, lines 1-6), the antistatic agent being selected from

polymeric antistatic agents, such as a quaternary ammonium cation-containing structure, crosslinking group-containing low-molecular antistatic agents, and electrically conductive antistatic agents (See for example Page 37, lines 15-24; Page 50, lines 7-16, wherein polymeric antistatic agents may include a quaternary ammonium cation-containing structure and electrically conductive antistatic agents may include metal oxide particles), and a low-refractive index layer (See for example Page 52, line 24-Page 53, line 12; Page 57, line 18-Page 58, line 22) having a lower refractive index than an underlying layer in direct contact with the low-refractive index layer, wherein an absolute value of a difference in refractive index between the transparent base material film and the antistatic hardcoat layer is not more than 0.03, whereby an occurrence of interference fringes is prevented (See for example Page 34, lines 12-22).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claim 3, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. in view of Matsufuji et al. (U.S. Patent Application Publication US 2004/0077752 A1).

Fukuda et al. discloses the invention as set forth above in Claim 1, except for the polymeric antistatic agent being a molecule crosslinking group-containing compound. However, Matsufuji et al. teaches that antistatic layers may be formed in a film using either a conductive metal oxide or a conductive polymer. As examples of conductive polymers, Matsufuji et al. teaches that conductive polymers made of organic electron-conducting materials, such as polyaniline derivatives, polythiophene derivatives, polypyrrole derivatives, and polyacetylene derivatives, may be utilized in the antistatic layers. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the polymeric antistatic agent be a molecule crosslinking group-containing compound, as taught by Matsufuji et al., in the antireflection film of Fukuda et al., to allow the antistatic layer to maintain high adhesiveness to the underlying layer while providing for appropriate conductivity for antistatic functionality.

16. Claim 5, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. in view of Ono et al. (U.S. Patent Application Publication US 2003/0158309 A1).



Fukuda et al. discloses the invention as set forth above in Claim 1, and further discloses that, when tested, the haze of the film be less than 50%, and preferably be less than 3% (See for example Page 28, lines 4-16). However, Fukuda et al. does not explicitly disclose a difference in haze between before and after the antireflection film is placed in an environment of temperature 80°C and humidity 90% for 500 hr is not more than 3. However, Ono et al. teaches a resin film composition (See for example Abstract) that is tested for resistance to moisture and heat. In particular, Ono et al. teaches that the resin film is tested in an environment of 65 degrees C and 85% humidity over a period of 500 hours, wherein the haze values before and after the test are determined and a difference in haze value is recorded (See for example Paragraph 0221; Tables 10-14). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a difference in haze between before and after the antireflection film is placed in an environment of temperature 65°C and humidity 85% for 500 hr is not more than 3, as taught by Ono et al., in the film of Fukuda et al., to assure that the film does not become cloudy or opaque after exposure to high heat or moisture. Though the combined teachings of Fukuda et al. and Ono et al. do not explicitly disclose the test being performed at 80 degrees C and 90% humidity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the test be performed at 80 degrees C and 90% humidity, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to have the test be performed at 80 degrees C and 90%

humidity, so as to expose the film to more realistic conditions in which the film will be actually operating in, thus obtaining a better understanding of how the film will react in its environment. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235.

### ***Conclusion***

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 10:00 AM - 6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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3/21/10

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